

IN THE SPECIFICATION

Please amend the paragraph at page 14, line 7 through page 15, line 23 as follows:

FIG. 4 is a circuit diagram of a light transmitter and a wavelength controller, where a transistor is used as the exothermic-effect-only heat source 17. A reference voltage V1, resistors R1 and R2, and the thermister 19 are used to determine the temperature of the laser diode 11 as packaged. The thermister 19 contacts a thermal contacting portion that can thermally contact, for example, the flange of the laser diode 11. The thermister 19 is therefore sensitive to a change in temperature of the laser diode 11 in the package. Moreover, resistors R3, R4, R5, and R6, a capacitor C, and an operational amplifier are used to compare the temperature of the laser diode 11 and a preset temperature value. The difference signal representing the difference between the temperature of the diode 11 and the preset temperature value is supplied to the base of the heat source transistor 17. The current flowing in the transistor 17 is changed in accordance with a resistance value of the load resistor R8 and the difference between the temperature of the laser diode 11 in the package and the preset temperature value. The generated heat of the transistor 17 is thereby controlled, whereby the temperature of the laser diode 11 is controlled. The transistor 17 is ordinarily packaged, having a thermal contacting portion that can thermally contact an external device such as a grounding electrode for heat radiation. By mounting the thermal contacting portion of this transistor and the thermal ~~contracting~~ contacting portion that can thermally contact the outside of the laser diode, the temperature of the laser diode 11 can be changed to control the wavelength. Although an NPN transistor is used as the heat source 17, any other electronic circuit device, such as a PNP transistor or an FET, if it generates heat. If the laser diode 11 has a coaxial type package, the anode of the laser diode is often electrically connected to the flange and, hence, to be grounded for stabilization of the operational characteristics thereof. For this purpose, the transistor can be easily mounted in contact with the flange having a relatively large area. Since the flange has good heat transfer properties, a change in temperature can be readily transferred. This helps to change the wavelength with high efficiency.